

National Bee-Keepers' Convention at Denver, Sept. 3-5, '02

AMERICAN BEE JOURNAL



GEORGE W. YORK,
Editor.

CHICAGO, ILL., JUNE 26, 1902.

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WEEKLY



APIARY OF C. E. KNOTT, OF BUFFALO CO., NEBR.—(See page 404.)

THE AMERICAN BEE JOURNAL

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R. C. Alkin, F. Greiner, Emma M. Wilson,
A. Getaz, and others.

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144 & 146 Erie Street, CHICAGO, ILL.

CLOSE SATURDAYS AT 1 P.M.—Our customers and friends will kindly remember that beginning with July 1, for three months we will close our office and bee-supply store at 1 p.m. on Saturdays. This is our usual custom. Nearly all other firms here begin the Saturday afternoon closing with May 1st, but we keep open two months later on account of the local bee-keepers who find it more convenient to call Saturday afternoons for bee-supplies.

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In order that every reader of the American Bee Journal, who does not already possess a copy of Prof. Cook's work, may have it, we wish to make the following

FOUR LIBERAL OFFERS:

No. 1.—For \$1.75 we will mail the American Bee Journal one year and a copy of Prof. Cook's book.

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Please remember that offers Nos. 2 and 3 of the above are made to those who are now subscribers to the American Bee Journal, and whose subscriptions are paid in advance. Offers Nos. 1 and 4 are made to any one who desires to take advantage of them.

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ESTABLISHED IN 1861 AMERICAN THE OLDEST BEE-PAPER IN AMERICA BEE JOURNAL

42d YEAR.

CHICAGO, ILL., JUNE 26, 1902.

No. 26.

* Editorial Comments. *

The Season is a rather discouraging one in some parts of the North. Cold weather continued late in spring, retarding brood-rearing, and up to the middle of June, in spite of occasional hot days, cool weather has ruled. Instead of being busied putting on additional supers, some have been obliged to feed to keep the bees from starving.

Mistakes in Queen-Rearing are likely to be made by beginners. One mistake is in thinking that good queens can be reared at times when the weather is chilly, or when bees are not busy bringing in nectar. Rightly managed, feeding may be made to take the place of a natural harvest, but there is nothing the bee-keeper can do to make up for the lack of good weather. Another mistake it is to think that a weak nucleus can produce good queen-cells. The royal larva should be flooded with royal jelly, and this is best attained in a strong colony. Up to the time the young queen is about ready to emerge, there is no better place for her than in a strong colony, and at no time before she begins to lay should there be any risk of her being chilled.

General Manager of the National.—We have received the following announcement from Emerson T. Abbott, which is self-explanatory:

ST. JOSEPH, MO., June 17, 1902.

EDITOR AMERICAN BEE JOURNAL—

Dear Sir:—The notice of Acting Chairman Root (see page 387) with regard to the General Manager of the National Bee-Keepers' Association seems to call for a statement from me.

First, the Board has or has not a right to receive Mr. Secor's resignation and elect his successor. If they have a right to do this, then one was elected some time ago, for eight members of the Board voted to elect his successor, and seven of them voted for one man. The three New York directors and myself refrained from voting. The vote was declared, and Mr. Secor was duly notified by the Acting Chairman as to the result, and was requested to turn the funds over to the newly elected General Manager, and he wrote that he would do so. However, later, at the solicitation of a disgruntled member of the Board in New York, he refused to do so. If the Board has any authority to act in a case like this, then every member of it who voted to elect a successor to Mr. Secor, formally voted at the same time to receive his resignation. As a majority of the Board so voted, of course he is out, and it is all nonsense to talk about reviewing a vote which has been canvassed and the returns announced. Therefore, Mr. Secor is not General Manager, and has not been since the day the vote was announced.

Mr. Abbott was not "supposed" to be elected—he was legally and clearly elected by a majority of the members voting, and is the only legal General Manager in existence to-day, if the Board has any authority to act on the question. If it does not (and I am inclined to doubt if it has), then Mr. Secor's resignation is before the membership, and

they should be given an opportunity to elect his successor at once. As soon as the membership selects another General Manager, the funds in my hands will be turned over to him, but they will not be turned over to Mr. Secor unless he is elected by the membership. The majority of those voting elects a General Manager, according to the Constitution.

The Buffalo amendment, in my opinion, gives the Board authority to remove a General Manager only for cause, and then to fill his place, but it does not give them authority to fill his place in any other case. If it does, then all the members of the Board having received notice of his resignation, and eight of them having voted for his successor—in fact, nine of the twelve, if my vote should be counted—that ended the matter so far as the Board was concerned.

A deliberative body may review a vote, but any sane man knows that a vote by ballot is final, if any one receives a majority of the votes cast.

It seems from the statement of the Acting Chairman, that the Board has decided that they have a right to act on Mr. Secor's resignation. If so, then I am General Manager. This is all I care to say at present.

EMERSON T. ABBOTT.

Prevention of Increase comes sooner or later to be a desirable thing for every bee-keeper who is very successful in wintering and does not wish to sell bees, unless his bees do not swarm to any appreciable extent. What may best suit one may not suit another. One of the old ways to limit increase—so old that it may be new to some—may be worth repeating here:

When the first colony swarms, hive the swarm in the usual way. When the second colony swarms, hive the swarm in No. 1, that is, in the hive of the colony that first swarmed. Then as each successive colony swarms, hive the swarm in the hive of the colony that previously swarmed.

The question arises, however, How long must a colony have swarmed before it is ready to receive another swarm? If a swarm is immediately returned to its own hive, it will only result in the swarm issuing again the same day or the day following, and it would seem that the same result would follow putting in a swarm from some other colony. Will some one who has had experience in the matter tell us how long it is necessary to wait after a colony has swarmed before a swarm can be given to it without the danger of having the swarm re-issue? Or is the plan one not to be commended?

* The Weekly Budget. *

MR. THOMAS G. NEWMAN, who for so many years previously to June, 1892, edited this journal, had the following paragraphs concerning the condition of his eyes, in his Philosophical Journal, under date of June 14:

Kind inquirers ask for news concerning the editor's vision, as nothing has been printed about it for several

months. In reply he would say that while a slight improvement is noticeable, he is still unable to read any ordinary printing or writing.

The best magnetic healers have been employed—including mental scientist treatments, suggestion and hypnotism, but all have failed to cure. The case is stubborn, and we doubt if any of these can cure, while we have to use our eyes so persistently.

HENRY DADANT, second son of C. P. Dadant, dropped into our office recently. He had been in Chicago looking up some work along his line—that of civil engineering. He found a position with the Illinois Central Railroad Company. He expects to hustle during his vacation months, and then return to the State University at Champaign, Ill. "Henry" will get along all right. He is well mannered, alert and cheery. Quite like his "dad" in these respects.

THE APIARY OF C. E. KNOTT, of Buffalo Co., Nebr., is shown herewith, concerning which Mr. Knott writes this:

I send a picture of my bee-yard, showing my wife, two boys, and myself. The boys are a great help to me; they are hiving a swarm apiece, one on a limb, the other between the legs of a saw-trestle. One boy is 10 years old and the other one is 11.

I have kept bees for three years, and like it first-rate. I have not lost any during the winter. Last summer I got 300 sections of comb honey and 250 pounds of extracted from 21 colonies. I winter the bees in open sheds on the summer stands. Our pasturage is nearly all alfalfa and sweet clover.

I am always glad to get the American Bee Journal. I read it the first of the papers. I wish it success, as usual.

C. E. KNOTT.

MRS. ANNA E. DANZENBAKER, wife of F. Danzenbaker, died at Claymont, Del., June 11, 1902, aged 63 years. When sending us this sad information, Mr. Danzenbaker wrote thus tenderly concerning his departed life companion:

CLAYMONT, DEL., June 11, 1902.

DEAR FRIEND YORK:—The sufferings of my saintly wife ended at 4 o'clock this lovely June afternoon, filled with bird songs and roses' perfume. How sadly we miss the inspiration of her sweet voice and kindly ways, that for 42 years have been the chief corner-stone and crowning joy of our life and home. How sacred in memory her sterling worth, her purity of soul and life, her sacred devotion to truth, duty, and right, for the very love of right.

She won the esteem and love of all who knew her. We were always proud of her. She taught us in life how to live for others' good; in death—too dear the lesson—to die without a fear.

F. DANZENBAKER.

For 42 long years to tread life's pathway together—and then to stop. How lonely will seem the way to our brother who now goes on without her who was thus long the delight of his life and home. Bee-keepers everywhere will sympathize deeply with Mr. Danzenbaker in his sad bereavement. The American Bee Journal desires to unite with them in their feelings of sorrow for a stricken brother.

THE RED CLOVER QUEENS which we have been booking orders for during the last six months or more, are now being mailed by our breeder. He has been greatly delayed by unfavorable weather, but he expects to get caught up with the present orders by about July 1, so those whose orders have been received lately can not expect to have their queens until July, for the orders were taken "first come first served," as will be noticed by referring to the Red Clover Queen advertisement previous to this week's issue.

Orders for regular Italian queens we are filling almost by return mail, at terms quoted on page 402.

ADVANCED BEE-CULTURE is the title of a 90-page (6x9) pamphlet on practical bee-keeping, by W. Z. Hutchinson. The first edition was issued about 10 years ago; the second edition is just off the press, and we have a supply at this office. It is sent post-paid for 50 cents; or with the American Bee Journal one year—both for \$1.35.

Convention Proceedings.

The Chicago Convention.

Report of the Semi-Annual Convention of the Chicago Bee-Keepers' Association, Held Dec. 5, 1901.

BY A SHORTHAND REPORTER.

(Continued from page 389.)

SHIPPING-CASES FOR HONEY.

QUES.—"What kind of shipping-cases is the most desirable?"

Mr. Burnett—The case that has come into general use now is known as the non-drip case; it is perhaps the best I know of. We prefer cases that hold 12 and 24 sections. Of course, we probably sell honey in other sizes, but people rather like uniformity of packages. They like to call for a package of honey, and know about what they are going to get. The non-drip case has certainly been the best thing that has come to my knowledge during my time in the honey-business, and I sometimes think it would be a little difficult to improve upon it; however, there are some people who don't understand how to manage it, even as simple as it is, and put the strips in without fastening them at all, and, at times, despite the fact that the honey is in that sort of a case, it is injured. I know it is something the bee-papers have called attention to a great many times, and I think it is a fact that the manufacturers do give directions to fasten in those strips before the honey is put in. Is not that a fact?

Pres. York—I think they do.

Mr. Burnett—I think I have seen some advertising calling attention to the fact that the strips should be fastened in the case, and it certainly is not of great value unless it is done, but if the combs are injured the paper that is in the bottom prevents the honey from getting out of that case, as a rule, and smearing the others. So far as some honey is concerned, I think it is the best thing now in use.

Mr. Walker—I have a few words to offer in regard to the shipping-case question. While I sanction all that Mr. Burnett says about the superiority of the non-drip case, I can't say I regard the cases now on the market under that name as deserving of such a name. Possibly I was among the first instrumental in the introduction of such a case, and I have used these cases largely—what I call the non-drip case—for perhaps 15 years, and after using them for a good many years I had them made to order by the Root Company, and succeeded in getting that company to list them in their price-list. When they first sent them out they made them after the pattern I was using. Of late years they have adopted something quite different. Possibly some of you remember my criticising them several years ago. I think it is stated in Gleanings, that the drip-sticks that are used in common shipping-cases are worthless, and that possibly two different kinds of drip-cases should be used, one for the careless bee keeper, and another for the other sort. The inference was that it was good enough if bee-keepers would only be careful enough. The point I wish to make is, the drip-sticks commonly used are altogether too shallow—only about $\frac{1}{8}$ of an inch in thickness; I have always used them about 5-16 inch deep. The reason for this is, if there is any drip to amount to anything, for instance, a couple of spoonfuls of drip in the bottom of the case, it will spread, and when you lift the sections up, you will find them half filled, while if the drip-sticks were 5-16 of an inch, or $\frac{1}{4}$ thick, there would be no trouble in that respect. I consider that a very essential point, and one that has been overlooked, and thus causes a great amount of money to be lost in handling honey that has been dripping more or less, to put it in condition. There are some very careless freight-handlers as well as bee-keepers. I had a consignment the other day, and the sections were thoroughly fastened all around—the combs were thoroughly fastened—they were the plain sections, averaging about 15 ounces to a section; the honey was packed in the common style of non-drip cases, with drip-sticks about $\frac{1}{8}$ -inch deep, and nearly all of them were fastened so they could not move about, and nearly every case

had a few sections that were broken more or less—just a few spoonfuls of drip—and it took hours of time to clean up those sections. Sometimes the drip would be in the corners of sections, and had to be gotten at. It has cost me at least \$50 to handle over cases like that, and I can see no sense in having those shallow drip-sticks. Mr. Root wrote me on the matter, that so many bee-keepers wanted shallow drip-sticks because their honey was so thick; I replied that thick honey required more drip-sticks. The shipping-cases that are so commonly sent out have paper in them that won't hold the honey, in case there is a drip; it is not manilla paper; it will tear easily and soak through, and if there is any drip to amount to anything, it is apt to get in the different cases. The original non-drip cases had manilla paper.

Mr. Moore—The honey is not dripping when it leaves us, why is it that it is when it reaches its destination? What is it that makes the drip? Is it because the sections break down? or why is it you have the drip?

Mr. Burnett—I arose to endorse what Mr. Walker has said. It is a fact that we find now that the best honey is thick honey, and that the space between the sections and the bottom of the case, that is the drip-sticks, are not thick enough; they do not raise the honey enough, so that when it drips out, it gets up against the section, and it causes the difficulty that he mentions; it had not occurred to me to be as technical about it as he is; he has evidently thought the matter out carefully. As to the leakage, there ought not to be any leakage in comb honey at any time, and I suppose the reason for it is that these drip-sticks are not large enough. We are pleased to have the inventor with us; it is a very great privilege to have heard from him. The calculation is that the combs should not be broken; if they do the drip-sticks would not be of much service, but it is for the little drip that may get out of the injured cell or cells that has not been capped properly.

Dr. Miller—Now, if these men who receive the honey find that there are so many unsealed cells, and that the honey is so thin that it runs out, then there is something wrong on the part of the bee-keeper. It seems to me that it ought not to be a matter of necessity that unsealed cells containing honey so thin it will run ought to be shipped. Do all the sections break out alike? Will a section that is thoroughly fastened, top and bottom, break out?

Mr. Dadant—Yes, lots of them.

Dr. Miller—Fastened on all four sides?

Mr. Dadant—On all four sides, yes.

Dr. Miller—I believe the great trouble is, a section is put in that is not thoroughly fastened.

Mr. Dadant—I have known of honey being shipped in car-load lots all the way from California, and not get broken, but in single packages they break often. The railroad companies manage us, we do not manage the railroad companies, and we have no recourse. I do believe we have not gotten hold of the railroad companies as we ought to; they ought to handle the honey so as not to break it. Our attention should be directed towards compelling them to transport our honey safely. They charge us well for it, and they ought to pay if they break the sections.

Mr. Burnett—I should be sorry to have a false impression go abroad. Where there will be some apparently not well fastened sections that do not break down, I have noticed that, as Mr. Dadant says, apparently a well-filled section will be broken out; but on examination I find that it was not really well fastened; it was fastened, as it were, down the center where the foundation was, but not outside of that. And then, again, I have thought that a section had at times been put in a case that had been jarred loose after it was put in there. As to the light weights breaking down, that is accounted for by the fact that the weight is not there to break it out, even though it is only fastened partially on two sides, and fairly well on top, and open on the bottom; the weight is not there, but the heavy section will be full, and it would seem as though it was fastened on the section, but it is only slightly fastened there, and not fastened on the outside. Years ago—when I was young, like Mr. York—I used to go to the depots and try to have the honey handled carefully, especially when it would arrive, and we sought various ways of getting honey from the railroad company with the least possible breakage. We got the men so that they would carry it out of the cars instead of dragging it out. The warehousemen had been accustomed, in carrying out the honey, in setting it down, to stoop over and then let it fall to the floor the rest of the way. Nearly all of the railroad companies now notify us when any honey arrives for us, if it is any considerable amount, and some railroad companies will for only one

case, and we will go and get it out of the car; they leave it in the car until we send for it, and we have very little breakage of honey in that way; the breakage is nearly all where it is unloaded, as a rule—very nearly always at the destination.

Mr. Dadant—Or at the transfer?

Mr. Burnett—Or at the transfer. Of course, the railroad companies now have gotten fairly well educated on that; they won't transfer it if they can help it.

Mr. Walker—I wish to ratify what Mr. Burnett says about fastening combs in sections; those that are well fastened in proportion to their weight are the ones that usually come through in good shape.

Mr. Dadant—I imagine it is a case of luck if they come through all right only slightly fastened.

"How would you fasten the strips in the no-drip cases?"

Dr. Miller—Use light nails.

(Concluded next week.)

Contributed Articles.

Honey-Crop Prospects—Finding and Clipping Queens.

BY C. DAVENPORT.

The season here, so far, has been about the most unfavorable I have ever known, it being cold and windy most of the time through April and the first part of May. The bees secured but very little from the spring flow of soft maple, fruit and dandelion bloom, as it was so cold and windy while they were in bloom that they were not able to fly much, and since the weather has warmed up there has been nothing for them to work on.

For some reason, unknown to me, basswood has failed to bud. Although, as I have said, the spring has been exceptionally cold, there were no hard frosts late enough to kill the basswood buds, if they had started.

Last summer we had the worst drouth known since the country was settled. Possibly this may be the cause. This spring there have been an unusual amount of rain and floods. A good deal of the white clover died out last season, owing to the dry weather. What was left started up well this spring, but all the low pasture lands, where the most of it was, have been flooded and under water a number of times, which has greatly injured it, for a good deal of it is buried under mud and sand. What will the harvest be? It looks now as if it might not be anything, but if the season is a failure it will be the first one here in my time, and I have a number of times seen the prospects fully as unfavorable looking as they are now, when a fair crop—and in one case a big one—was secured before the season closed.

I have been going ahead, getting things right side up, and am about ready to handle anything in the way of a crop that may come. I am glad to say that at this date the queen in every colony I own is clipped, and clipped short, too. The last few years I have not practiced clipping to any extent, for I practice artificial swarming mostly, so there was no climbing for swarms, anyway. But last year I was ill at the time this work should have been done, and was unable to secure any one that was competent to do it.

Swarming was soon on in full blast; of course, I had men to hive the swarms, but they were not able to handle all of them. One day, when I was not able to walk around, I lay under a tree, near one of the yards, and watched swarm after swarm fly off to the woods. There were two men for this yard, both of whom were a failure, but the best and all I could get at the time. I resolved then that another season I would have every queen clipped, but I had a hard time doing it this spring; in fact, I had to clip the most of them in the night. It was so cold the most of the time early in the spring that I disliked opening the hives and exposing the brood as much as is often necessary to find a queen, and when the weather became suitable there was nothing in the fields for the bees to work on, so they were all at home ready to rob and pounce on a colony the minute a hive was opened.

I have said before that whenever I wished to open a hive and handle a colony for any purpose I always did so,

no matter how crazy the bees were to rob. I wish to modify this by saying that there are times when it is not practical to expose a colony long enough to find the queen, especially with German or black bees, for one disadvantage about this race of bees is that they sometimes become so frightened or excited when being handled that they race and run all over the combs and hive, and finally cluster in bunches on the bottom-bars, so that it often takes a long time to find the queen, and in some cases, this spring, before the queen could be found, the great horde of robbers following me around would have a good share of the exposed stores carried off. But I will say that, bad as the robbers were, a medium to a strong colony never failed to expel them after their hive was closed. Although I have Italian bees from some, and, in fact, from almost all the noted strains, the majority of my colonies are of the German race, and I say that to find the queens in all of them would be a big job, even if there were no robbers.

I have done a good deal of studying over this problem, which was finally solved in a most satisfactory way by the use of zinc and Rambler's famous jouncer. About sundown, on warm evenings after the bees had ceased to fly, entrance-guards would be attached to a large number of hives, and the bees jounced out and allowed to run in through the zinc. Myself and assistant timed ourselves one evening, and found that one of us could attach the entrance-guard and jounce out a colony in three minutes. It was such a simple, quick and easy way to find black queens by this method that I was afraid there must be a catch about it somewhere, and thought that perhaps it might be that the jouncing would injure the brood or eggs, for the jouncer I use is not the elaborate padded affair that Rambler invented; so I went slowly until I had time to watch and notice if there were any bad after-effects on the brood. A frame in a number of hives was marked, and the brood carefully inspected before and each evening after the hives were jounced. No ill effects whatever could be noticed, and this is the method I shall practice to find queens after this, whether robber-bees are bad or not; if they are not the bees could be jounced out during the day, which would save night work, for it takes the bees some time to work through the zinc.

I used to go around with a lantern two or three hours later, and the queens were easily found among the bees that were still outside.

I have had experience enough with clipped queens before, though, to know that when natural swarming occurs everything does not always go just right, for I have had swarms without queens cluster and hang for some time before returning to the hives they issued from, and in numerous cases they would try to enter some other hive, usually one in which a swarm had been hived shortly before. Again, I have had them break or divide up and try to enter a number of hives; in such cases they would usually all get killed, if the colonies in the hives they were trying to enter were not well smoked. Such cases, while by no means rare, are exceptions; the majority of swarms will, if their queen is clipped or confined by zinc, return to their own hive without clustering. But going over a yard, in the spring, and clipping all queens, does not insure that all queens that issue with the first or prime swarms will be clipped, for it is not very rare for a colony to supersede its queen just before or during the swarming season, and, when this is done, if they are fairly populous they are almost sure to swarm with the first young queen that hatches.

Now, I will give beginners in clipping a little advice that may in time pay them for the trouble of reading this article.

When a swarm issues and clusters, if you can't find the queen don't decide they will come back anyway until you raise or tip the hive up so you can look along and up between the bottom-bars of the frames. If they have superseded the old, clipped queen there will be ripe queen-cells in sight. Cells from which young queens are nearly ready to hatch look considerably different from those that have only been sealed two or three days. If not able to tell in this way, by taking the frames out and looking them over the cell from which the young queen has hatched can be found. If no such cell is in the hive the bees can be depended upon not to leave for the woods, provided no young queen from some other hive on her wedding-flight, or one driven out, has not joined them. This only happens in quite rare instances, but I have lost swarms in this way, and so have others.

The bright side, or the ease and simplicity of handling natural swarming on the clipped-queen plan, has been told

by others. I have told about the balks and difficulties that one will sometimes encounter when practicing this plan in a large way. Southern Minnesota, June 7.



Foul Brood in San Diego Co., Calif.—Needs of Legislation, Etc.

BY HON. J. M. HAMBAUGH.

"During the years 1859 and 1860 there were upwards of 6000 colonies of bees imported from the East into this State [California]. They arrived in better condition, apparently, than those of former years, yet, owing to the fact that large numbers of these were infected with *foul brood* prior to their purchase and shipment, together with the effects of so long a voyage, probably half of the whole number was lost. Many of the remainder have since died, or now linger in a diseased condition, which is infinitely worse for the parties owning them than if all had died at once.

"Thus the result has been bad for all concerned, for while some have lost their money, others have injured their reputation, besides paralyzing for a time an important branch of productive industry."

So wrote Mr. Harbison, in 1861, as quoted from his "Bee-Keeper's Directory."

Just think of it! Three thousand colonies of *foul-broody* bees allowed to enter our State, and be indiscriminately scattered all through the country! From the reading we would infer that the 3000 colonies were a putrid mass of dead brood, germ-inoculated honey, wax, etc., and this with the "many that lingered in a diseased condition," destroyed the reputation of many bee-keepers, and, for a time, paralyzed the bee-keeping industry.

This, you will notice, was over 40 years ago, and the bee-keeping industry has survived this calamity, and many might imagine that we were safe from a return of this extremely dangerous contagion. Let us not deceive ourselves. The hydra-headed monster is abroad in the land, and I very much doubt if it has ever been thoroughly banished from our State since its introduction over 40 years ago.

Like Mr. Dadant, I never had any acquaintance with this disease until I came to California, and was appointed foul-brood inspector of our county (San Diego). Feb. 13, 1900, is the date of my first introduction. I had often wondered if I would recognize the disease. I had already come in contact with many badly afflicted bees, and worried Prof. Cook's patience (thanks to him) with various samples, but they all seemed to lack the chief characteristics, viz.: "The elastic ropiness, coffee color, and glue-pot smell." Here was a case, however, that would not admit of a doubt, and I was obliged to put my first seal of condemnation upon 30 colonies. Since that time I have found over 300 cases, and it extends over an area of 70 miles square, and approximates a total of nearly 7000 colonies. This will make one diseased for nearly every 23 healthy colonies. This, of course, does not include many apiaries not visited, which would naturally lower the percent.

I also found the disease in spots, with a central location, traceable to imported diseased bees from foreign parts, pointing very clearly to the need of a law prohibiting the moving of bees from one locality to another without a certificate from a duly authorized inspector, that such bees are free from contagious diseases, etc. The bee-keeping citizens in these unfortunate localities are vehement in their expressions, and do not request such a law, but simply say they *demand it*. They are the victims of unscrupulous parties, who have simply unloaded their venom upon an innocent purchaser, not only to poison him, but to contaminate and possibly ruin, an entire community.

In the name of justice, bee-keepers of California, will you not co-operate with us and see that our law-makers frame and enact a law that will protect us from such an unnecessary source of contagion among our bees? The dread disease (*foul brood*) is among us, and without a proper knowledge of it, and its cure, it is to be dreaded.

Let me tell you, Mr. S. was a purchaser of over 100 colonies of bees in an adjacent county, two or three years ago. There was always trouble among them, and, not being informed as to the gravity of the situation, he took no pains to read up. I found him, about one month ago, with 35 colonies, and the surrounding dead ones bore strong evidence of the man's careless incredulity and ignorance. Of the 35 colonies, 33 were in all stages of the disease, and one of the remaining two was queenless; hence, he had but one sound colony in the yard. And this is not all. Every neighbor's bees within reach of this apiary were more or less afflicted. A widow moved 23 colonies within one-fourth of a mile of him last fall, only six or seven months

previous to my visit, and I found 19 out of the 23 inoculated with the disease, and had to be condemned.

I could give other instances in which we have reason to be apprehensive, but I will close by reiterating my previous position, that box-hives and stationary combs should be done away with by legislation. They are a nuisance to the industry, and exceedingly unprogressive.

Let us hear from some of our inspectors upon this subject.

San Diego Co., Calif., June 5.



Production and Care of Extracted Honey.

Written for the Wisconsin State Convention, held in February, 1902,

BY ELIAS FOX.

The preparation for a future crop of extracted honey begins soon after the close of the present season. This preparation consists in having an abundance of stores which varies with the season. Should there be no flow of honey after basswood, each colony should have from 40 to 50 pounds of honey, but should there be a fall flow, a less quantity would be sufficient. The point is, not to have less than 25 pounds of good honey in each hive when the bees are placed in their winter quarters.

Next to plenty of good stores is the necessity of having a young, vigorous, and prolific queen.

Then comes proper wintering, which consists in placing the bees in suitable winter quarters at the right time.

In my estimation, after 18 years of practical experience, my method of manipulation is as nearly successful as the average.

Late in the season I remove the oil-cloth from the hives and place over them a piece of factory cloth. Then, as soon as cold weather begins, the bees are carried to the cellar and the covers are removed. The first hive is placed upon 2x4 studding lying flat upon the bottom of the cellar. Two sticks $\frac{3}{4}$ -inches thick are placed crosswise on top of the first hive to support the next one, and thus they are tiered up six hives deep.

The covers of the top hives, however, are left on, and one end slightly raised to allow the escape of accumulating moisture.

The cellar should be as near underground as possible in order to control the temperature. It should be dry and well ventilated with at least two doors three feet apart. The temperature should range from 40 to 50 degrees above zero. Prepared thus the bees come out in the spring with combs as dry and free from mold as when put into the cellar. The bees should be removed from the cellar as early in April as the weather will permit. You will, no doubt, be surprised to see them bringing pollen, and perhaps you will wonder where they get it so early. But if you make investigation you will find them working upon willow, tag-alder, poplar, or hazelnut, or perhaps all of them. This will be a week, or perhaps two weeks, before elm and soft-maple are in bloom. Thus, some bee-keepers make a mistake by leaving their bees in the cellar till the latter trees bloom. If these simple instructions are implicitly adhered to our winter loss, as a rule, will be nearly nothing.

As soon as the bees are removed from the cellar and have a cleansing flight, each hive should be cleared of all dead bees. The frames should be rearranged by placing a frame well filled with honey at one side of the hive, and the queen and brood should be placed next to this frame, and then another well-filled frame should be placed upon the opposite side of the brood. Place oilcloth over the factory cloth, and put on a tight-fitting cover to exclude robber-bees, storms, and wind.

Then, in ten days or two weeks, should the weather prove favorable, go over them again, and if the bees are sufficiently strong, spread the brood and insert one empty frame of worker-comb in the center of the cluster. In one week repeat the operation, adding two empty combs in those hives having bees enough to cover them well. Continue thus until the brood-chamber is over-flowing with bees and brood in at least six of the eight frames. Then put on an upper story with at least three or four frames of worker-comb, and let the queen have access to this also.

As soon as the honey-flow begins, confine the queen to the brood-chamber with a queen-excluding honey-board, and if there is any honey to be had I will guarantee the bees will get it. At least this has been my experience. Should the colonies be sufficiently strong add a third story, and as soon as the honey is capped remove and extract.

Have a sufficient number of large barrels to hold two or three pounds of honey. Remove the heads and insert

molasses-gates near the bottom of each barrel. Place these barrels around the walls of the extracting room on strong benches of sufficient height to draw off the honey into 60-pound cans.

Have the head of each barrel covered with fine cheese-cloth, through which every ounce of honey should be strained. Leave the honey in the barrel as long as you can conveniently do so, as by so doing, should the barrel contain any thin honey, it will rise to the top and ripen by evaporation. Then draw off the honey into 60-pound cans. (In my estimation the 60-pound can is the only perfect package for storing and shipping honey.) Screw down the caps on the cans as tightly as possible. Then place the cans in cases holding two each, which makes a 120-pound package, net. Securely nail down the covers of the cases, and you can safely ship your honey to any foreign country should you so desire. This package is convenient to handle, free from leakage, and consequent unsightliness. Also, there will be no danger of having fermented honey in any climate.

You should get all of your clover honey out of the hives by the time the basswood season begins. At the close of the basswood season clean all the combs out again, in case there should be a fall flow of honey. Thus, you have each variety of honey separate from the others, and should there be a better market for one variety than the other, you are in a position to take advantage of it without any extra expense.

The secret of success in the honey-business is to do the proper thing at the proper time; as our seasons here in the North are short, at the best, we must make honey while the sun shines.

Vernon Co., Wis.



The Cause of Spring Killing of Drones.

BY G. M. DOOLITTLE.

"I have been keeping bees for about a year and a half now, and read the American Bee Journal. I want you to tell me through the columns of that paper what is the trouble with my bees. I have ten colonies that wintered well in the cellar, coming out strong in bees. They are strong now, and I see plenty of them working on the opening heads of white clover to-day, but they are killing off their drones. What could the drones have done that they are thus killed? They are making a business of killing them as much as they did last September. What is the cause, and what will be the result? Two of the ten colonies swarmed a short time ago."

The correspondent seems to think that his drones must have done something very wrong to cause the bees to kill them; but I hasten to assure him and the readers that his drones were not "sinners" above other drones, for all drones are treated in the same way under like circumstances. The failure of flowers, or with a "sea" of bloom and the flowers failing to secrete nectar on account of unfavorable weather, or the atmosphere not being favorable for the secretion of nectar, no matter if the weather appears all right, often causes the bees to kill their drones in May or June, as well as later on in August and September; and if the scarcity of nectar is great enough, drones just ready to emerge from their cells have the cell-covering gnawed open, and they themselves ruthlessly dragged out just before their wings are formed, and before they get even a sip of honey.

And if the failure of nectar-secretion continues, no matter how nice and fine the weather may appear, till the colony is on the verge of starvation, drone-brood, in its milky condition, is torn from the cells and sucked dry so as to prolong the existence of the colony, the refuse, not having any life-supporting qualities left, being cast out at the entrance to puzzle the bee-keeping novice who is not acquainted with these things.

The questioner did not tell us anything about what kind of weather he had been having in his locality, nor in which quarter the prevailing winds were. But I suspect that it was very much the same as we frequently have in this locality at about the time of the opening of the white clover bloom, namely, cool, cloudy, and windy, with more or less rain; or, what is nearly or quite as bad, all clear weather with the air in the northeast. I do not know why it is so, but in this locality we rarely get any secretion of nectar from any source of bloom, when the wind or air continually hangs in a northeast direction. I have known colonies to be killing their drones and dragging out drone-brood right in the very height of white clover bloom with seemingly nice weather for nectar-secretion, except that there was a northeast air day after day.

During cool, cloudy weather the bees rush out every

time the sun "breaks the clouds," and appear to be working well, while they are not getting a living for themselves and the brood, to say nothing about storing sufficient to afford the presence of drones, or these "gentlemen of leisure," as one bee-keeper calls them. After our questioner has studied into matters long enough he will know that such a state of affairs as this during white clover bloom is not an uncommon occurrence; and I believe a failure of nectar in the clover blossoms, in our correspondent's locality, is the cause of the killing of his drones.

The fact that only two of the colonies have swarmed, when all came out strong from the cellar, and that no swarming is being done at the time of writing, shows that there is no secretion of nectar to amount to anything, else his colonies would keep on swarming. Only two swarms, with the bees killing off their drones, is proof to my mind that the clover he saw his bees work upon is yielding little else save pollen, even though it appeared to him that his bees were working well.

As to what the result will be, I see no reason to fear anything bad, unless this honey-dearth continues so long that his colonies starve from his neglect to feed them. Nature makes no mistakes, and bees never kill off drones where they are needed. The colonies which have not swarmed have given up all idea of swarming for the present, without doubt, so they have no need of drones; and I will venture the assertion that, if he will look into the hives of the two colonies that have swarmed, he will either find drones or a young fertile queen, for a colony having queen-cells or a virgin queen will preserve their drones till the very last, even though the whole colony perish with hunger. If the failure of nectar continues, then the drones in these two colonies will be killed off as soon as the young queens have become fertile or laying queens; but our correspondent can rest assured that, until said queens have been mated, the drones in those hives will not be driven out as useless consumers.

My opinion is that whenever drones are being killed off in the spring of the year, or in early summer, it will amply pay to examine the colonies, and all not having sufficient stores to warrant them in keeping their drones, should be fed. In this way we not only preserve the drones so that they will be present should a sudden flow of honey come on so as to cause the bees to swarm before drones started after this flow arrived, were perfected; but it would also cause the bees to keep up the rearing of worker-brood to a greater or less extent, thus providing the bees for the basswood honey harvest. In fact, it never pays to allow colonies to come anywhere near the starvation point at any time of the year, and especially is this true during the forepart of the season.

Onondaga Co., N. Y.

No. 4.—Rearing Long-Lived Queens and Bees.

BY DR. E. GALLUP.

Now for the discovery in dissecting the queen-cell that I found, in the before mentioned basswood log hive. The queen was in the embryo stage, pretty well advanced, and had what I will call an umbilical cord attached to the point of the abdomen and the outer end glued to the bottom of the cell, with a large amount of royal food in the cell. I never have seen this fact mentioned by but one writer, and that I think was in the proceedings of the late Canadian convention. I never have seen this cord attachment to any nymph reared from an egg laid in a worker-cell in all I have ever examined, but have seen them from eggs laid in queen-cells by the queen.

Two weeks ago (May 3) my youngest boy brought home two small black swarms. In hiving them one had no queen so I gave it a frame of brood to hold them until I could fix them to suit. In 7 or 8 days, perhaps more, I gave a sealed cell from a superseding colony, and cut out 6 cells carefully from the comb I gave them, so I could examine them thoroughly at my leisure. This comb was taken out of the superseding colony. Five of those nymphs had no cord attachment, but the 6th one did; this nymph was a little farther advanced than the other 5. This must have been a superseding cell that I had overlooked. The 5 were started in worker-cells; they never have the cord, neither does a worker or drone nymph. Now, here is a kink that queen-breeders would better look into. When I first made the discovery I intended to follow it up, but soon had to leave bee-keeping for my other occupation. I claim that the queen draws nourishment from this large amount of food through this cord, in a somewhat similar manner to human beings and animals. Who knows?

Now, no one need dispute the fact that the queen deposits the eggs both in the cells built by the workers at natural swarming and superseding time. The cord is attached inside of the abdomen just at the very point, and extends nearly if not quite a 16th of an inch inside. Cut the cell out of comb whole, and then dissect carefully from the base of the cell in making your examinations.

In dividing colonies for increase, and allowing one part, or compelling one part, of the colony to rear queens from a worker-egg never was satisfactory to me. Queens thus reared are short-lived, and consequently their colonies cannot come up to the scratch.

I have received two queens from a party that started out well, but they did not hold out satisfactorily, at all.

I have already told you that bees stop breeding here for a while but can forage all winter. Well, towards spring I noticed that they were not showing up right, and on opening out one hive I found the queen and about a single handful of workers. The other hive had about twice as many, so I broke up both colonies. You can readily see that they were so short-lived that when the queens stopped breeding there was where the spring dwindling came in. I had one queen that reared extra-fancy colored bees, but she could only occupy a piece of comb about the size of my hand. There was no dwindling, for there was nothing to dwindle. Another queen kept her hive fairly full of brood, but the workers did not live long enough to store any more honey than they consumed from day to day, and early in the fall dwindled to nothing. I could tell of dozens of colonies that were about as worthless as the above. My object of sending for queens to different breeders last summer was to try to select a good strain to breed from. In selling, I kept one queen from one breeder that is holding out well so far.

As a boy I was a great and intense fancier of pets. Some 12 years ago I went into the Brown Leghorn business, paying \$5.00 for a sitting of premium eggs, and had a good hatch. But all got the swelled head. That was easy to get along with. I had lots of sure cure, warranted to cure swelled head, so I cured up a trio—two pullets and a cockerel. In breeding from those I had lots of swelled heads for 5 years, and, by the way I had one chick hatch from that first sitting with as beautiful a swelled head as I have ever seen.

I went into fancy pigeons; purchased a pair of Nuns; kept them three years and never raised but one young one—all died with canker when from one to three weeks old. I exchanged eggs with other pigeons, and the Nuns could raise the other pigeons everytime, but the other pigeons could not raise Nuns. I had lots of fun trying to cure canker with "sure cures," and I learned that the disease was transmitted in the egg. Cut the heads off; don't breed from diseased chickens that you have cured. I have had no diseased chickens of any kind for five years.

I have had several cases of bee-paralysis. Take an ax and cut the queen's head off; introduce another queen and the cure is complete—providing you do not introduce another diseased queen.

I was born in Canada, 65 miles north of the Vermont line; I kept bees there, and they wintered on the summer stand, usually in a small open shed built for that purpose. They were frequently confined to their hives from November 1 until May 1, and there were very few dead bees on the bottom-board in the spring. They wintered splendidly, providing they were ventilated right, and had sufficient stores. The thermometer often showed 40 degrees below zero. One time in particular it was 40 degrees below zero for 8 days and nights in succession. The bees came out nearly as strong in the spring as they went in in the fall. No spring dwindling or bee-paralysis was known there then. They swarmed naturally, and reared natural queens. No monkeying with them to try to beat Nature. They were long-lived bees.

I might have given my ideas in a short article and right to the point, and not pestered the editor and readers as I have, but my object is to get up a new fad—get all interested enough to go at it with a vim that will make success instead of a failure of the business.

Rear long-lived, healthy queens, and rear them in a natural manner. I care not how long you get their tongues or tails. We want bees for business, not for fancy.

Orange Co., Calif.

(Continued next week.)

Queenle Jeanette is the title of a pretty song in sheet music size, written by J. C. Wallenmeyer, a musical bee-keeper. The regular price is 40 cents, but to close out the copies we have left, we will mail them at 20 cents each, as long as they last.

Questions and Answers.

CONDUCTED BY

DR. C. C. MILLER, Marengo, Ill.

The Questions may be mailed to the Bee Journal office, or to Dr. Miller direct, when he will answer them here. Please do not ask the Doctor to send answers by mail.—EDITOR.]

Swarming Indications.

When should one begin to watch bees for swarming? and at what time of the day are they most likely to come out?

OHIO.

ANSWER.—There can be no fixed rule. It is a matter of conditions rather than a matter of the almanac. I don't know enough to tell exactly what the conditions are; but before a colony thinks of sending out a prime swarm it must be strong, and there must be a good yield of nectar. As you are probably in a white clover region, you may begin to watch for swarms as soon as the bees get to work on white clover. A prime swarm will not usually issue more than three hours before or after the middle of the day. An after-swarm may issue as much as six hours before or after noon. Probably you will find that nearly all the swarming will occur between 8 a.m. and 4 p.m.

Getting Increase and Transferring.

I have 7 very strong colonies in large box-hives. I want some increase without regard to surplus of honey. I intend to let them swarm, hive the swarm in a frame hive on the old stand, set the box-hive back after four or five days, open the box-hive and divide equally (as nearly as I can) in two parts—bees, brood, stores, and queen-cells—and put in frame hives. Will this work?

OHIO.

ANSWER.—Yes, it will work, but you may expect a messy job with so much brood and honey present. If you are not after honey, you would have a more equal division not to set the swarm on the old stand (which will make the swarm very strong, leaving the mother colony proportionately weak), but to put the swarm on a new stand. Then there is a likelihood that it will swarm again in about eight days, and 21 days after the time when the prime swarm issued you can transfer with no worker-brood in the way.

Oxide of Zinc for Hive-Covers.

I saw an article in the American Bee Journal in regard to commercial oxide of zinc being so good to cover hives. Can metal roofs, that are leaky, be patched with that material? How would the oxide ground in oil do? If you know of anything really No. 1 for patching up old, leaky, rusty, tin roofs that can't be soldered, please let me know it.

MISSOURI.

ANSWER.—I don't know, and respectfully refer the question to be answered by any one of the fraternity who can answer.

Introducing Queens at Swarming-Time.

As I am just a novice in the handling of bees, I wish to ask if at swarming-time one could move the old hive to a new location, and, waiting until all the old bees had gone back to the old stand (if they will go back), then introduce a queen to what were left in the old hive? Would there be any danger of her getting killed?

NEBRASKA.

ANSWER.—Introduction of queens is such an uncertain matter that there is almost always some danger, but if all queen-cells are removed and the new queen is introduced a day or two after the swarming, you will have the danger reduced to a minimum.

Referring to the implied doubt in your parenthesis, it may be said that there is no room for doubt, that when, after swarming, the mother colony is removed to a new stand, and the swarm put on the old stand, the field bees will return to the old stand unless you take some special precaution to keep them on the new stand. But it will be a day or two before they will all have returned.

The Use of the Queen's Sting.

I herewith send you some clippings that I think are good information for the public, except several lines that I will draw my pen around. I do not recollect ever seeing them in the American Bee Journal. If there is any truth in it some of the readers will certainly know. How one would find out I am anxious to know.

OHIO.

ANSWER.—The sentence referred to reads as follows:

"The sting is an organ of use to the queen-bee in disposing of rivals, being mainly used in depositing eggs in their proper position during the working season."

The writer of that sentence is not alone in his belief, though what ground there may be for the belief I do not know. In the scientific part of Cheshire's work one would expect to find a pretty full exposition of the subject if anything were positively known about it, but there is only one possible reference to it, which is in these words:

"It has been remarked that the decided curvature of the queen's sting, in contrast to the straightness of that of the worker, is intended to give her such an advantage in combat, that, while her sting is applied, her antagonist should be powerless to reach her, so that a queen duel may not be fatal to both; but the curvature appears to me rather to refer to mating and ovipositing, as the extremity of the sheath can be turned far more completely out of the way through its deviation from the straight line."

That can hardly be understood to mean that the sting is a help either in mating or ovipositing, but rather that its curved shape makes it less a hindrance than it otherwise would be.

Getting Brood-Combs Built.

This is my first year with bees. I have Danzenbaker hives. If at the close of the white honey harvest I double the brood-chamber, putting full sheets of foundation in the upper story, will the bees build comb suitable for brood-rearing next spring? If not, how shall I best proceed?

MICHIGAN.

ANSWER.—Bees will build comb only as they need it. If, after white clover, there is a sufficient income from other sources, they will build all the comb they need to occupy. If they gather nothing, they will do little more than to daub the foundation with propolis so as to make it less fit for use. The simple rule is to give foundation when they need more room, whether it be early or late.

Alfalfa in Tennessee.

Does alfalfa yield honey the first year? I sowed some two years ago; it came into bloom, but the bees did nothing with it. Last fall I sowed alsike, which has not fared much better, and buckwheat this spring, that bloomed nearly a month ago, with like result.

TENNESSEE.

ANSWER.—As far east as Tennessee you will probably find that alfalfa yields no honey the first nor the twenty-first year. It seems strange that a plant that stands so very high as a honey-yielder west of the Mississippi, should be of no value in that regard farther east. As to alsike and buckwheat, you may find them behaving differently other years.

Only One Night to Denver.—By going over the Chicago & North-Western and Union Pacific railways, you will need to spend only one night on the road from Chicago to Denver. There is a daily train leaving Chicago at 10 a.m. on the C. & N. W., and leaving Omaha, Nebr., over the Union Pacific at 11:30 p.m. of the same day. This train arrives in Denver at 2 p.m. the following day. That is, by starting from Chicago at 10 a.m. on Tuesday, Sept. 2, you will arrive in Denver at 2 p.m. the next day, or Wednesday, Sept. 3, in ample time for the first session of the National Bee-Keepers' convention, which begins that evening.

Now as to rates: The round-trip price at that time from Chicago to Denver will be \$25. By going over the route mentioned, the regular sleeping-car rate would be only \$3.00, because of being only one night on the way.

There is also another saving by taking the C. & N. W. and Union Pacific. There is a Pullman tourist car on this train from Omaha, in which the charge for a double berth is only \$1.50 to Denver. As no sleeping-car accommodations are required on this train east of Omaha, it will be seen that one can go comfortably by this route for a very small sum.

We may say that Dr. C. C. Miller and the Editor of the American Bee Journal expect to go over the route indicated, starting at 10 a.m. on Tuesday, Sept. 2. Who will join us?

GENERAL ITEMS

A Veteran Bee-Keeper.

My bees all came through strong, and commenced to swarm on May 30. I am sorry I did not put supers on all of them before I did. There is a good show at present for honey this year.

I have had 4 swarms from those I did not put on the supers; the rest are all working nicely in supers.

I am nearly 79 years old, do not use glasses, and am quite nimble as yet. I go out with dog and gun when in season. My bees are on the farm, so I have one mile to go every day.

HENRY WHITE.

Humboldt Co., Iowa, June 10.

Awful Winter for Bees.

We have had an awful winter for bees. I lost 17 colonies out of 28. Bees did not have a flight from Oct. 15 to Feb. 22. Some days the snow in front of the hives would be black with bees, and I used to tell my wife I did not see how they could possibly live and waste themselves so.

We had very cold weather all the spring; things are white with frost this morning. I am afraid everything is frost-bitten in the garden.

C. G. ASCHA.

Berkshire Co., Mass., June 9.

Discouraging Outlook.

The outlook is very discouraging indeed for this section of country. The incessant rains and cool weather have reduced the bees to the verge of starvation.

My bees were in swarming condition a month ago, but in spite of all the feeding I have done they have dwindled until it looks as if there would be but few bees to gather honey, if there were any to gather.

Everything is late here, and the prospect may brighten a little later on.

MRS. JENNIE TOWLE.

Clark Co., Wis., June 7.

Tick Trefoll.

What relation is bush-clover to alfalfa and other clovers? I enclose another sample of a plant without root. It began blooming about May 15, and will continue until about June 10. The bees have not had anything from it yet, as it has been too wet.

CHAS. M. DARROW.

Vernon Co., Mo., June 4.

[This specimen, which is much more mature than the first, shows the plant to be a Tick Trefoil, probably Desmodium paniculatum, and not a bush-clover. The ripened pod is curved with minute hooked hairs which catch on the wool or hair of animals, or to clothing; hence the name, "Tick." "Trefoil" refers to the leaf being made of three leaflets, or being trifoliate.]

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1902—Bee-Keepers' Supplies!

We can furnish you with The A. I. Root Co.'s goods at wholesale or retail at their prices. We can save you freight, and ship promptly. Market price paid for beeswax. Send for our 1902 catalog.

M. H. HUNT & SON, Bell Branch, Wayne Co., Mich

Adel Queens and Bees

QUEENS BY RETURN MAIL.

The standard strain of yellow-banded bees. All select-tested Queens. Each, \$1.00. Ready to mail June 1. Cat. free.

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22A4t

WENHAM, MASS.

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75 colonies in Improved Dovetailed Hives, in lots to suit purchaser.

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To Portland, Me., July 5th to 9th, inclusive, to Providence, R. I., July 7th to 9th, inclusive.

One Fare for the Round-Trip.

By depositing tickets with agent terminal line, an extension can be obtained until Aug. 15th, returning. Write John Y. Calahan, General Agent, 111 Adams St., Chicago, for particulars.

27-26A2t

liate. The Tick Trefoil belongs to the large and important pulse or leguminosae family, to which bush-clover, alfalfa, and other clovers belong.

The family, as a whole, is rather sweet, as among its most promising representatives might be mentioned the clovers, trefoils, lupine, locust, vetch, and false indigo.—C. W. WALTON.]

Bad Spring for Bees.

The spring has been very bad for bees here, and the losses from spring dwindling have been very great. I have a few colonies in fine condition, but more very weak, besides a number of them dying out entirely since the first of March. JAMES P. HOWARD.

Milwaukee Co., Wis., June 9.

Basswood or Linden Tea.

Europe and American linden or basswood are just the same—the blossoms can be gathered for tea in case of sickness. The tea is good for fevers, all kinds of sore throat, measles, whooping cough and chicken-pox. Take the tea as a drink in time and it will save many a long sick spell, and a large doctor's bill.

The blossoms are in full bloom about July 10; gather them when they are in bloom, with the stem, then dry them in the shade. They are then all right for tea. Just put boiling water over the blossoms, and in 10 minutes the tea is ready for drinking. The hot water can be put on the tea a second time. In case of sickness the tea needs to be made fresh two or three times a day. It needs to be sweetened with honey. (See page 170.)

CATHARINE WAINRIGHT.

Poweshiek Co., Iowa.

A Beginner's Experience with Bees.

I am a "tenderfoot" in the bee-business, having had but one year's experience before the present one. I will not stop to tell of the disappointments and mistakes, but proceed to display my ignorance by propounding a few questions.

Very many of the natives keep bees in the "native" way, in boxes and hollow logs, and if they "rob" out 20 to 30 pounds of honey, bee-bread and brood, they think they are doing fairly well.

Please tell me why, this year more than usual, about $\frac{3}{4}$ or $\frac{1}{2}$ of the swarms fly away? Many come out and leave after having been hived in new "gums."

My man, who works in the shop for me, has had some years' experience with bees, in the regular Georgia way, and we are transferring all our colonies into the regular 8-frame Langstroth hives. One was transferred in good shape, and in 21 days we drove out another fine swarm, and in cutting out the old comb we found brood enough to fill 7 frames, which was properly arranged in another hive, and a sufficient number of bees induced to enter, and now the seventh day they appear to be doing well. Besides this we secured $2\frac{1}{2}$ gallons of honey. I will report on this colony later.

Another colony had the super nearly

Bee-Keepers—Attention!

Do not put your money into New Fangled Bee-Hives, but buy a plain, serviceable and well-made hive, such as the regular Dovetailed hive arranged for bee-way sections. Honey-producers of Colorado—one of the largest honey-producing sections in the world—use this style.

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alog? 60 illustrated pages; describes **EVERYTHING NEEDED IN THE APIARY**. **BEST** goods at the **LOWEST** prices. Alternating hives and Ferguson supers. Sent **FREE**; write for it. Tanks from galv. steel, red cedar, cypress or fir; freight paid; price-list free.

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Please mention Bee Journal when writing.

The Novelty Pocket-Knife.

Your Name and Address on one side—Three Bees on the other side.



[THIS CUT IS THE FULL SIZE OF THE KNIFE.]

Your Name on the Knife.—When ordering, be sure to say just what name and address you wish put on the Knife.

The Novelty Knife is indeed a novelty. The novelty lies in the handle. It is made beautifully of indestructible celluloid, which is as transparent as glass. Underneath the celluloid, on one side of the handle is placed the name and residence of the subscriber, and on the other side pictures of a Queen, Drone, and Worker, as shown here.

The Material entering into this celebrated knife is of the very best quality; the blades are hand-forged out of the very finest English razor-steel, and we warrant every blade. The bolsters are made of German silver, and will never rust or corrode. The rivets are hardened German silver wire; the linings are plate brass; the back springs of Sheffield spring-steel, and the finish of the handle as described above. It will last a last-time, with proper usage.

Why Own the Novelty Knife? In case a good knife is lost, the chances are the owner will never recover it; but if the "Novelty" is lost, having name and address of owner, the finder will return it; otherwise to try to destroy the name and address, would destroy the knife. If traveling, and you meet with a serious accident, and are so fortunate as to have one of the "Novelties," your POCKET-KNIFE will serve as an identifier; and in case of death, your relatives will at once be notified of the accident.

How appropriate this knife is for a present! What more lasting memento could a mother give to a son, a wife to a husband, a sister to a brother, or a lady to a gentleman, the knife having the name of the recipient on one side?

The accompanying cut gives a faint idea, but cannot fully convey an exact representation of this beautiful knife, as the "Novelty" must be seen to be appreciated.

How to Get this Valuable Knife.—We send it postpaid for \$1.25, or give it as a Premium to the one sending us THREE NEW SUBSCRIBERS to the Bee Journal (with \$3.99.) We will club the Novelty Knife and the Bee Journal for one year, both for \$1.90.

GEORGE W. YORK & CO.

Chicago, Ill.

Please allow about two weeks for your knife order to be filled.

Please Mention the Bee Journal when writing Advertisers ****

full in 24 days after they were transferred to an 8-frame hive, with full sheets of foundation, and are working on the second.

We are endeavoring to introduce the regulation hives with foundation in frames, and starters in the section, but the people consider it a useless outlay; but when they come to see our product next fall they may think differently.

F. S. DUNKLER.

Haralson Co., Ga., May 26.

[*It is quite possible that more swarms desert their hives than usual because of unusual heat. The thermometer may stand higher, or with the same height there may be more moisture in the atmosphere. It is possible, also, that you do not give as much ventilation and shade as you ought. Leave the cover partly off for a day or so after hiving.—EDITOR.]

Poor Prospects for California.

On page 347, I notice an item by A. J. Cook, in regard to California prospects for 1902. I must say it surprised me very much. Perhaps his means of getting knowledge of the situation are much greater than mine. Up to this date my bees have not stored a pound of honey more than their wants, and from inquiry and observation I am well satisfied the bee-men in Southern California are not going to reap much of a harvest this year.

I have been around a little also in San Bernardino, Riverside, and Orange Counties, and I could not see that prospects looked any better than in Los Angeles County. There may be a few local places where some honey will be gathered.

I am sorry that I must disagree with Prof. Cook, but the facts, so far as I know, compel me to do so.

A. ROZELL.

Los Angeles Co., Calif., June 6.

Managing Swarms and Swarming.

I have a method of handling bees which is different in some respects from the general custom in regard to swarming and hiving of swarms. I have practiced this method for several years with complete success.

How to produce the largest possible amount of fancy white comb honey, also the most extracted honey: We try to get all colonies as strong as possible before raspberry and clover bloom. At the commencement of raspberry bloom we put supers on all colonies, and they usually swarm when the supers are about two-thirds full. This is just what we want them to do. As the queen's wings are clipped we go to the hive that is swarming, cage the queen, and if we conclude to run the swarm for comb honey we hive them on the old stand in a brood-chamber containing starters only.

Take the super from the parent colony and place it on the swarm. The following evening we take the parent colony and place it beside its swarm, and leave it there for six or seven days, then move the parent colony to a new stand. The brood is all sealed in seven days, and it is better to have the flying bees from the parent colony enter with the swarm, as it gives the swarm wax-

workers, which is very important at this time, and it gathers later; the parent colony is prevented from casting a second swarm, and all goes well.

There are several reasons why we should get more honey than we would had they not swarmed. The swarm has nothing to do for several days but gather honey, as they have but little brood to care for; as the combs in the super are drawn, and the frames in the brood-chamber contain starters, they commence work in the super at once, and build combs in the brood-chamber only as fast as the queen needs cells to deposit eggs and pollen, and the cells will be of the worker size, and but little, if any, drawn comb will be built.

For extracted honey we give the swarm full combs or full sheets of foundation on wired frames, as this prevents the queen from entering the super.

If there is anything that is not made plain I will be pleased to try to make it so. E. E. COVEYOU.

Emmet Co., Mich., May 27.

Good Queens from Poor Ones.

EDITOR YORK:—Please tell me what Geo. W. Riker means when he says, on page 302, "I found I could rear queens from my poorest queens that produce long-lived workers."

INQUIRER.

[Give it up. We'll have to refer it to Mr. Riker himself. Perhaps he can and will tell.—EDITOR.]

Second-Hand Oil-Cans.

On page 339 is something on "Honey in Old Oil-Cans." In 1871-72 I kept bees in California, 12 miles from Los Angeles. I commenced in the spring of 1872 with 48 colonies, increased to 100, and that season got eight tons of honey, all extracted, and I shipped it to San Francisco, all in second-hand oil-cans, and all to one commission merchant, and got the top price. It netted me 12½ cents, freight and commission paid. There was not one complaint made. The cans were as clean as new, with no odor of the oil after they were cleaned. All the bee-keepers there used them. The trouble with the cans was referred to on page 339, they were not cleaned well. After cleaning with concentrated lye they have to be left in the sun for several days, and there will be no odor left.

J. BECKLEY.

Rice Co., Minn., June 2.

[If you know how, and will do it right, it may be all right. But it hardly pays to risk using old, second-hand oil-cans for holding honey. That is, if you care anything about your honey and your trade.—EDITOR.]

A Discouraging Spring.

When it comes to booming bees here we are not in the business. They have not made a living. They came out strong in the spring, in grand shape, but they have been on a strike and refuse to work, and it is a hard matter to arbitrate with them.

I do not believe I will get any increase or an ounce of honey this year unless things change, as they are not

RUMELY

That is a name that means character and utility. It suggests the best in Threshing Machinery. Hives-gating, start with the Rumely and you will end at the same place. Get our catalog on the New Rumely Separator and the Rumely Gear-Driven Traction Engine. All approved devices and appliances to each, and constitute the one perfect threshing outfit. Catalog shows our engines for all purposes. We send it for the asking. Write to-day.

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PRICES:
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1 Untested Queen \$.60
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1 Select Tested Queen 1.00
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Boys, Girls, old and young alike, make money working for us. We furnish capital to start you in business. Send us 10c stamps or silver for full instructions and a line of samples to work with. DRAPER PUBLISHING CO., Chicago, Ill.
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Low Rate Excursions.

On July 5 to 9, inclusive, the Nickel Plate Road will sell tickets at one fare for round-trip to Portland, Me., and return, with final return limit Aug. 15th. Particulars at City Ticket Office, 111 Adams St., Chicago. 25-26A2t

as strong now as when they came out in the spring.

We have had an off year in this section of the country, with high, cold winds, and freezing weather.

I live in the village near the Scioto Marsh, in the onion-raising district. I keep bees, raise onions and fruit, and garden for a living, and to say that I have been on the anxious seat this spring is putting it mild.

Onions—the wind blew them out of existence. Then I rescued them again, and the wind and freeze had them all except one acre. All vegetation is frozen. We had no rain this spring until June 6, and the dirt was blown in great clouds, and did thousands of dollars damage to the onions and other crops. So with the dry weather, cold and bad high winds every day for the last six weeks, and clover and linden blown down, we are not in it for a honey crop this year, from this place in Ohio, anyway.

If it were not for the "Old Reliable" and Gleanings in Bee-Culture I would go out of the bee-business and hire out as a cheap errand-boy.

F. McBRIDE.

Hardin Co., Ohio, June 9.



Caves vs. Cellars for Bees.

The following from Editor Doolittle, in the Progressive Bee-Keeper, will make some wish they could have caves instead of cellars:

The consumption of stores from the latter part of September, at which time they were prepared regarding their winter's supplies, to the time of putting out, averaged about six pounds to the colony, for those here at home, while those in the out-cellar consumed nearly or quite twice as much. Those in the out-cellar were in a house-cellar, with a family in the rooms above, while those here at home were in a special cellar dug in the side-hill, so that an even temperature of 45 degrees was maintained during the whole time they were in winter quarters, which was from Nov. 15 till April 15 to 17th, or approximately five months.

How Cubans Take Honey.

The native Cubans have log-hives 40 inches long and 8 or 10 inches square, the hives being made by sawing the royal palm into sections and cutting out the center, which is a tough pith. A board is nailed on to close the back end of the hive, the front being left entirely open. So says Rambler in Gleanings in Bee-Culture. As to securing the crop, he says:

The owner approaches a hive much as we do with smoker in hand; and if not a modern smoker it is something like a stew-pan arrangement; or (as Cubans all smoke) the ever-present cigar may be used.

After the bees are driven back, a thin

knife with a hooked point is inserted, and a comb cut out and dropped into a broad shallow copper—well, I will call it a kettle. Two or more of these are used; and when one is filled it is taken to the palm honey-house for further treatment, while the man with the knife fills the other kettles. The board on the rear end of the hive is taken off and the honey is cut from both ends of the hive or until the worker-brood is exposed. Although I was not a witness to it, I am informed that drone-brood is also cut out and dropped into the dish with the honey.

In the honey-cabin the honey-comb in the round-bottomed kettle is thoroughly pulverized with a large wooden pestle or pounder. From the kettle the mashed honey is emptied into willow baskets of much the same shape as the kettles—broad and shallow.

Upon one side of the palm cabin is a huge trough 10 or 12 feet long. This, too, is made from the royal palm, and sometimes is of such size as to hold several barrels of honey. The baskets with mashed honey-combs are placed over the trough and left to drain. I supposed these baskets would have to drain for a long time, but was informed that the combs, being so thoroughly pulverized and warm, the honey would drain out in half an hour, and the refuse then dumped into an open barrel or into another palm-tree trough, where it could be solidly packed against the day of rendering into beeswax, which operation is performed in larger kettles, according to the boiling process, and under some adjoining tree.

When the trough is filled with honey it is drawn off into the large bocoy outside the building.

Ebb and Tide in Bee-Keeping.

Some 15 to 20 years ago a man in this county and about 10 miles north-east of here, made in one season \$1,000 with 100 colonies, at least so it was reported. Of course it was not long until nearly all his neighbors were keeping bees, and at one time there must have been something near 300 colonies in that neighborhood. In enumerating that section in June, 1900, if my memory serves me correctly, I did not find 10 colonies all together. This is one straw that points toward a decrease in the number of colonies kept in Missouri. Is it not probable that there are many similar cases?—S. E. MILLER, in the Progressive Bee-Keeper.

Keeping Bees Without a Bee-Book or Paper.

Commencing with six colonies on frames, I run them the first season without a bee book or journal, thinking I could manage them with a knowledge I had gained from my father, he having kept bees in hollow logs and square boxes. I lost one colony the first season. In the latter part of August, while overhauling them, I found a number of queen-cells in one hive sealed over, preparatory, as I thought, to swarm, as I thought it too late in the season for them to build up and store enough honey to winter on, and as I had seen in some paper or somewhere else that cutting out queen-cells would stop swarming, and being anxious to try my hand, I cut out the

cells. As it was a strong colony I thought I would get one super of fall honey from them. In about two weeks, on looking at them I found they had dwindled down to an average colony. The next time I looked at them I found they had dwindled below an average colony. The next time I looked at them, I found there were but few bees in the gum, and on closer examination, I found they had no queen. I then added them to another colony. I learned afterwards it was a case of supersedure. If I had had a bee-book, I would have learned from it what to do, and would not have lost them, and the bees would have paid the price of two or three books. So much for trying to run an apiary without a bee book or journal.—T. W. MORTON, in the Progressive Bee Keeper.

Temperature Affects Proportion of Extracted to Comb Honey.

No matter how good the honey-flow may be, if warm weather, especially warm nights, are wanting, there will be very little wax-production. Full super combs often make a difference between a crop or no crop of honey. The past season's experience taught me that when the nights were cool, no wax was secreted. I was producing sections and found those bees that had not to build comb, produced considerably more than those that were given foundation only. The previous season, which was warm throughout, gave me almost as much comb honey per colony as extracted. I have no doubt, where bee-keepers' experiences vary, the difference is due to the unlike conditions surrounding during observation.—Australasian Bee-Keeper.

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Alfalfa Clover80	1.40	3.25	6.00

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The 1900 Census xx
of the largest American Cities is given.

One side shows a grand map of our great country, with **counties**, railroads, towns, rivers, etc., correctly located. The other side shows an equally good map of the world. Statistics on the population, cities, capitals, rivers, mountains, products, business, etc., a veritable photograph of the UNITED STATES AND WORLD.

The map is printed on heavy map paper and is mounted on sticks ready to hang. Edges are bound with tape.

1901 EDITION.—Every reader should consult it every day. The plates show all the new railroad lines and extensions, county changes, etc. Especial attention is given to the topography of the country; all the principal rivers and lakes, mountain ranges and peaks are plainly indicated. The leading cities and towns are shown, special attention being given to those along lines of railroads. The Canadian section of the map gives the provinces of Ontario, Manitoba, and British Columbia, with nearly all of Quebec and New Brunswick, the county divisions being clearly marked. The Southern portion of the map includes the Northern States of the Republic of Mexico, and the Bahama Islands.

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Two maps on one sheet, all for only \$1.50, sent by mail or prepaid express; or we will forward it free as a premium for sending us Three New Subscribers at \$1.00 each; or for \$2.00 we will send the Map and the American Bee Journal for one year. Address,

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over Nickel Plate Road, at one fare for the round trip, within a radius of 200 miles from starting point. Tickets on sale July 3rd and 4th, with return limit of July 7th. Three daily trains in each direction between Chicago, Cleveland, Buffalo, New York, Boston and New England points. Every facility offered for comfort of the traveling public. Individual American Club Meals, ranging in price from 35 cents to \$1.00, and meals a la carte in dining-cars on Nickel Plate Road. Write John Y. Calahan, General Agent, 111 Adams St., Chicago, for special rates to eastern points. 21-26A2t

The Emerson Binder.

This Emerson stiff-board Binder with cloth back for the American Bee Journal we mail for but 60 cents; or we will send it with the Bee Journal for one year—both for only \$1.40. It is a fine thing to preserve the copies of the Journal as fast as they are received. If you have this "Emerson" no further binding is necessary.

GEORGE W. YORK & CO.,
144 & 146 Erie Street, CHICAGO, ILL.

Bicycles.—For some time the advertisements of the Mead Cycle Company have appeared in the columns of the American Bee Journal. Every year the business of this Company has grown until now it exceeds 50,000 bicycles sold through mail orders all over the world each year. The Mead Cycle Company keeps its factories running all winter storing up wheels of the finest quality, and is always ready in the spring and summer to fill orders promptly at prices which are lower than any manufacturer selling on the old plan, through local dealers, can deliver a wheel of even inferior quality. The Mead Cycle Company can ship any wheel at any price the same day the order is received. Readers of this paper can be assured of prompt and honorable treatment. When writing for catalogs and prices mention the American Bee Journal, and address Mead Cycle Co., Dept. R 38, Chicago, Ill.

California! If you care to know of its Fruits, Flowers, Climate or Resources, send for a sample copy of California's Favorite Paper—

The Pacific Rural Press,

The leading Horticultural and Agricultural paper of the Pacific Coast. Published weekly, handsomely illustrated, \$2.00 per annum. Sample copy free.

PACIFIC RURAL PRESS,
330 Market Street, SAN FRANCISCO, CAL.

Please mention Bee Journal when writing advertisers.

Queens Now Ready to Supply by Return Mail

Stock which cannot be excelled. Each variety bred in separate apiaries, from selected mothers; have proven their qualities as great honey-gatherers.

Golden Italians Have no superior, and few equals. Untested, 75 cents; 6 for \$4.00.

Red Clover Queens, which left all records behind in honey-gathering. Untested, \$1.00; 6 for \$5.00.

Carniolans—They are so highly recommended, being more gentle than all others. Untested, \$1.00.

ROOT'S GOODS AT ROOT'S FACTORY PRICES.

C. H. W. WEBER, 2146-2148 Central Avenue,
CINCINNATI, OHIO.
(Successor to Chas. F. Muth and A. Muth.)

Marshfield Manufacturing Company.

Our specialty is making **SECTIONS**, and they are the best in the market. Wisconsin **BASSWOOD** is the right kind for them. We have a full line of **BEE-SUPPLIES**. Write for free illustrated catalog and price-list.

Marshfield Manufacturing Company, Marshfield, Wis.

7A26t

Please mention Bee Journal when writing

Famous Italian Queens!

BUCKEYE STRAIN OF 3-BANDED LONG-TONGUES are wonderful honey-gatherers. One customer bought 10 dozen. Just think of it! (He bought a few last season as a trial.)

MUTH'S STRAIN GOLDEN ITALIANS.

As fine as money can buy. Either of the above by return mail, 75c each; 6 for \$4.00. Selected tested, best money can buy, \$1.50.

FULL LINE OF THE FINEST DOVETAIL HIVES AND SUPPLIES.

Send for Catalog.

THE FRED W. MUTH CO.,

Front and Walnut Sts., CINCINNATI, OHIO.

Please mention Bee Journal when writing

**28 cents Cash
paid for Beeswax.**



This is a good time to send in your Beeswax. We are paying 28 cents a pound—CASH—for best yellow, upon its receipt, or 30 cents in trade. Impure wax not taken at any price.

Address as follows, very plainly,

GEORGE W. YORK & CO., 144 & 146 Erie St., Chicago, Ill.

HONEY AND BEESWAX**MARKET QUOTATIONS.**

CHICAGO, June 18.—The market is practically over in comb honey until the new crop comes forward, so far none has appeared in this city. A little of the extracted is on sale, but it is chiefly of a low grade of amber selling at about 5 cents per pound. There is a large amount of the white extracted honey of the crop of 1901 still on sale bringing 5@6c, according to body and flavor. Beeswax sells upon arrival at 32c.

R. A. BURNETT & Co.

CINCINNATI, March 6.—The market in extracted honey is good with prices lower. Amber, for manufacturing purposes, brings from 5½@6¼c; better grades from 7@8c. Fancy comb honey sells at 16c; lower grades hard to sell at any price. Beeswax strong at 27@30c.

THE FRED W. MUTH CO.

ALBANY, N. Y., May 1.—Honey market is dull. Very little call now for any grade. Well cleaned out of stock and season practically over. Some comb honey is selling at 14@15c. Extracted, 6@6¼c. Beeswax, good demand, 30@31c.

H. R. WRIGHT.

DETROIT, Apr. 8.—Fancy white comb honey, 15c; No. 1, 13@14c; dark and amber, 11@12c. Extracted, white, 6½@7c; dark and amber, 5@6c. Beeswax, 29@30c. **M. H. HUNT & SON.**

NEW YORK, May 19.—There is a limited demand for comb honey and prices range as follows: Fancy white, 14c; No. 1, white, 13c; amber, 11@12c; no buckwheat or dark on the market and no more demand for any. Market on extracted remains very inactive. Plenty of supply with only fair demand. We quote: white, 5½@5¾c; light amber, 5@5½c; southern, in barrels, 50@55c gallon. Beeswax firm at from 30@32c pound, according to quality.

HILDRETH & SORLEKEN.

CINCINNATI, June 7.—There is hardly any change in the honey market. Comb is not moving much, and whatever is left can be bought at cut rates. Water-white is selling from 14@15c. Extracted is in fair demand and finds steady sales, in barrels, 5@5¼c; water-white alfalfa from 6@6¼c; white clover from 6¼@7c. Beeswax is coming in more freely and sells for 28c.

C. H. W. WEBER.

SAN FRANCISCO, June 11.—White comb, 10@12 cents; amber, 7@10c; dark, 6@7 cents. Extracted, white, 5@—; light amber, 4¼@—; amber, 4@— . Beeswax, good to choice, light, 27@29c; dark, 25@26c.

There is not much of any description coming forward at present or being offered for sale. To purchase freely, better figures than are warranted as quotations would have to be paid. No evidences are displayed, however, of large operators doing any noteworthy competitive bidding so far on this season's product, although the crop is not coming up to expectations in point of quantity.

WANTED!

Honey and Beeswax. Mail sample and state price delivered Cincinnati. **C. H. W. WEBER,** 2146-2148 Central Ave., CINCINNATI, OHIO.

21A1f Mention the American Bee Journal.



SHEEP MONEY IS GOOD MONEY and easy to make if you work for us. We will start you in business and furnish the capital. Work light and easy. Send 10 cents for full line of samples and particulars.
DRAPER PUBLISHING CO., Chicago, Illa.

BINGHAM'S PATENT Smokers

24 years the best. Send for Circular.

25A1f **T. F. BINGHAM, Farwell, Mich.**
Please mention Bee Journal when writing

Meeting B. Y. P. U., Providence, R. I.

The Nickel Plate Road will sell tickets July 7, 8 and 9 at one fare for the round-trip, with stop-over at Niagara Falls and Chautauqua Lake if desired; also via New York City if preferred. For sleeping-car accommodations, call at City Ticket Office, 111 Adams St., or address John Y. Calahan, General Agent, Chicago. 23-26A2t

BEE-KEEPERS,

Save Money by Buying

Hives, Sections, Brood Frames, Extractors, Smokers, AND EVERYTHING ELSE YOU NEED, OF**THE W. T. FALCONER MFG. CO., Jamestown, N. Y.**

Our goods are guaranteed of superior quality in every way. Send for our large illustrated catalog, and copy of

THE AMERICAN BEE-KEEPER, a monthly for all bee-keepers; 50c a year. (Now in 12th year. H. E. HILL, Editor.)

W. M. GERRISH, E. Nottingham, N. H., carries a full line of our goods at catalog prices. Order of him and save freight.

Please mention Bee Journal when writing.

Fourth of July

rates via Nickel Plate Road. One fare for the round trip, July 3rd and 4th, within 200 miles of starting point. Return limit July 7th. Write John Y. Calahan, General Agent, 111 Adams Street, Chicago, for particulars.

20-26A2t

**\$300,000,000.00 A YEAR** and you may have part of it if you work for us. Uncle Sam's poultry product pays that sum. Send 10c for samples and particulars. We furnish capital to start you in business. Draper Publishing Co., Chicago, Ill.**Wanted Comb and Extracted Honey!**State price, kind and quantity. **R. A. BURNETT & CO.,** 199 S. Water St., CHICAGO 33Atf Please mention the Bee Journal.**Tennessee Queens**Daughters of Select Imported Italian, Select long-tongued (Moore's), and Select, Straight 5-band Queens. Bred 3 1/4 miles apart, and mated to select drones. No bees owned within 2 1/2 miles; none impure within 3, and but few within 5 miles. No disease. 29 years' experience. **WARRANTED QUEENS,** 75 cents each; **TESTED,** \$1.50 each. Discount on large orders. Contracts with dealers a specialty. Discount after July 1st

Send for circular.

JOHN M. DAVIS, 14A26t **SPRING HILL, TENN.****Cheap Rates to New England.**

\$18.90 to Providence, R. I., and return, via Nickel Plate Road, July 7, 8 and 9. Particulars at City Ticket Office, 111 Adams St., Chicago, and Union Ticket Office, Auditorium Annex. Write John Y. Calahan, General Agent, Chicago. 22-26A2t

BEE-SUPPLIES!**ROOT'S GOODS AT ROOT'S PRICES.**Everything used by bee-keepers. **POUDER'S HONEY-JARS.** Prompt service. Low Freight Rates. **NEW CATALOG FREE.****WALTER S. POUDER.** 512 MASS. AVE. INDIANAPOLIS, IND.**25th Year Dadant's Foundation 25th Year****We guarantee Satisfaction.** What more can anybody do? **BEAUTY, PURITY, FIRMNESS, No SAGGING, No LOSS. PATENT WEED-PROCESS SHEETING.****Why does it sell so well?** Because it has always given better satisfaction than any other. Because in 24 years there have not been any complaints, but thousands of compliments.

Send name for our Catalog, Samples of Foundation and Veil Material. We sell the best Veils, cotton or silk.

Bee-Keepers' Supplies OF ALL KINDS *****Very fine pure-bred **BARRED PLYMOUTH ROCK** Chickens and Eggs for sale at very low prices.**Langstroth on the Honey-Bee—Revised,** The classic in Bee-Culture—Price, \$1.25, by mail.**BEESWAX** wanted at all times.....**CHAS. DADANT & SON,** Hamilton, Hancock Co., Ill.

Please mention Bee Journal when writing

THE DANZENBAKER HIVE

The best comb-honey hive on the market may be obtained of The A. I. Root Co., of Medina, Ohio; at any of their branch houses, and many of their local and jobbing agencies. Send to the address nearest you, and save freight, and get quick delivery.

Branch Offices.

The A. I. Root Co., 10 Vine St., Philadelphia, Pa.
 Wm. A. Seiser, Manager.
 The A. I. Root Co., Syracuse, N. Y.
 F. A. Salisbury, Manager.
 The A. I. Root Co., Mechanic Falls, Me.
 J. B. Mason, Manager.
 The A. I. Root Co., 1024 Miss St., St. Paul, Minn.
 H. G. Acklin, Manager.
 The A. I. Root Co., San Antonio, Texas.
 Toepperwein & Walton, Managers.
 The A. I. Root Co., 1200 Md. Av., S. W. Washington.
 Saffell & Herrick, Managers.
 The A. I. Root Co., San Ignacio 17, Havana, Cuba.
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Jobbing Agencies.

Geo. W. York & Co., 144 & 146 Erie St., Chicago, Ill.
 C. H. W. Weber, Cincinnati, Ohio
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 Carl F. Buck, Augusta, Butler Co., Kan.
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 The L. A. Watkins Mds. Co., Denver, Colo.

Would you increase your profits? Then try the Danz. Hive. It's used from Maine to California. Read the following:

MECHANIC FALLS, MAINE, Feb. 28, 1902.
THE A. I. ROOT COMPANY, Medina, Ohio.GENTLEMEN:—I am VERY, VERY pleased that you are willing I should recommend the Danz. hive. I have had a great many inquiries regarding it, and have not felt at liberty to recommend it over our regular hives. At first I was prejudiced against it, but the sales have increased without recommendations, and wherever I have sold they have bought again and praised the hive with extravagant claims, and I am forced to the conclusion that it is the BEST COMB-HONEY HIVE on the market.
J. B. MASON,
Manager North-eastern Branch The A. I. Root Co.

The above unsolicited testimonial speaks for itself.

M. H. Mendleson, of California, has just ordered 700 Danzenbaker supers. Sales are doubling every year. Still the demand for honey in Danz. sections is greater than the supply. If you are wise you will raise comb honey in Danz. hives.

THE A. I. ROOT CO., MEDINA, OHIO, U.S.A.**GEORGE W. YORK & CO.,** 144 & 146 Erie Street, CHICAGO, ILL., are headquarters for ROOT'S BEE-KEEPERS' SUPPLIES IN CHICAGO. Send to them for their free Catalog.